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A SYMPOSIUM ON SOCIAL PROGRESS

WHAT IS SOCIAL PROGRESS?

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The Word

In this place, addressing the Academy on this occasion, I feel constrained to take—or to try to take—a position that shall be logical and scientific. I feel thus constrained even though, or better because, the question "What is 'social progress'?" seems to me logically a meaningless question about things that admit of little precise analysis.

The question is meaningless because there are no procedures, either measurements or mere observations, that can be regarded as suitable for its investigation. The question is also meaningless because the term 'social progress' is useless and worse than useless as a symbol in performing logical operations. The first of these assertions hardly requires further proof. Let us examine the second.

Oliver Wendell Holmes the younger, writing in his old age to a Chinese friend, once remarked:[1] "I have said to my brethren many times that I hate justice, which means that I know if a man begins to talk about that, for one reason or another he is shirking thinking in legal terms." I shall presume to make a single exegetical remark on Holmes's text: the phrase 'shirking thinking in legal terms' may be generalized to read 'shirking thinking in terms that can be used for even rough and ready logical purposes or for any sort of clear thinking.' Holmes's remark is not new, but it is the opinion—the induction—of a man who through a long life had formed his opinions from experience under the burden of responsibility. The same opinion was earlier expressed by Montaigne, who remarked:[2] "We say, indeed, Power, Truth, Justice: they are words that denote something great, but that something we are quite unable to see and conceive." A general treatment of the matter, not modern or rigorous, but sufficient for many purposes, may be found in Bacon's theory of Idols.[3] Probably, in most ages, at least a few sensible men have always known what Montaigne, Bacon, and Holmes knew; that many words, for other uses indispensable, are useless for clear thinking.

Why are terms like justice and social progress useless for clear thinking? First I suppose because, unlike such a word as contract, they have no accepted, fairly clear meaning, and again because, unlike such a word as cathode, they can be given an arbitrary definition only at the cost of strong persistent emotional opposition. Consider, for instance, the probable attitude of many thousands of Nazis to a definition of 'justice' that should make discharging hostile university professors unjust. Now consider a definition of 'social progress' that should make this same action socially unprogressive. The effect must be, at least for many people, not logical thinking, but strife, because strong feelings associated with the word inhibit its logical use and demand its nonlogical use. I suggest that an arbitrary definition of 'social progress' that should make, or should not make, the National Labor Relations Act an instance of social progress would, if the point were raised, arouse similar, if less violent, strife in this room tonight.

Bury has said[4] that for Turgot the idea of progress "was an organizing conception, just as the idea of Providence was for St. Augustine and Bossuet an organizing conception, which gave history its unity and meaning." In plain English this means that for Turgot the facts of history were subordinate to and had to be forced into conformity with certain lofty sentiments and dogmatic beliefs. I suspect that Turgot's view is still the prevalent view.

In general, men feel that words like justice and progress must have a meaning, must correspond to some deep reality, but they agree in only one respect: each feels that this reality, this unknown thing, must fully accord with *his* sentiments. So discussion of the attributes of justice or progress is like discussion of the attributes of God. It is the business of metaphysicians; it is clearly not the business of scientists. Therefore, if we are to pursue our subject, we must altogether abandon social progress as a logical symbol, or

[1] *Justice Oliver Wendell Holmes: His Book Notices and Uncollected Letters and Papers.* Edited by Harry C. Shriver, New York, 1936, p. 201.

[2] *The Essays of Montaigne,* translated by E. J. Trechmann, London, 1927, Book I, Chapter 23, pp. 103–120.

[3] *Novum Organum,* Book I, Aphorisms XXXVIII–LXVIII.

[4] J. B. Bury, *The Idea of Progress,* London, 1920, p. 158.

as a concept, or as an abstract metaphysical reality, and look at facts. Perhaps we may more easily reconcile ourselves to this lowly occupation by reflecting that the question "What is progress?" has been much debated, but without result, and that there is hardly any social change that has not been called progress by somebody.

The Sentiments

For Montaigne, power, truth, and justice—though they lack clearness—'denote something great'; and I do not believe that here Montaigne was speaking ironically. At all events, the social importance of the sentiments behind these words and of the words themselves as expressions of these sentiments is inestimable. Human societies have existed in which science and logic played only a small part, but there have been few indeed in which these sentiments did not have a great part. And in our own societies the words justice and truth themselves—the words themselves—have for thousands of years served to reinforce the sentiments, to arouse them, and perhaps even to instill them where they were lacking. Such words are indeed indispensable. But 'progress' is a modern invention which only yesterday attained to the dignity of personification. Today Progress is the most youthful, though not the fairest, of the goddesses, pale and wan of face, but not for love. We fear for her. Perhaps it is that fear which has brought us together tonight.

I wonder whether the word progress—so unlike 'truth' and 'justice'—is a trustworthy vehicle for the deep and abiding sentiments of men, except only for hope, or others that may have been recently, and weakly, associated, and whether it is not much more a sterile intellectual construction, for the greater part a rationalization of the eighteenth century *philosophes* and their nineteenth century heirs, the good liberals, under the influence of economic, political, and social change and the increasing control and exploitation of the environment. I suspect, in short, that for most of us the word progress suggests something less great than the words truth and justice do, for I believe that it expresses sentiments which are on the whole less deep in the human heart, because they have had a place there far less long. They seem not to have been a need of our forefathers. Unhappily this question—the social importance of the affective states, of the sentiments and emotions, associated with the word progress and with belief in progress—seems unripe for solution. I can but raise the question, express my doubts, and pass on.

The Rationalizations

The social importance of the *belief* in progress is another question. Considering this belief apart from the accompanying sentiments and emotions, as an intellectual influence, we may hazard the guess that its importance is small. For two centuries the belief has, no doubt, occupied the attention of political and social philosophers and of many others, but it is hard to see that much has come of this intellectual manipulation of the idea that has greatly changed human societies. On the one hand, the belief is difficult of application, being in no sense a scientific induction; on the other hand, it is perhaps only a quasi-religious dogma.

Social Changes

So we come to the question of the nature of social change. Social change is a fact. Here, however ignorant we may be, we stand on firm ground. Yet we are indeed most ignorant, and how unprepared to cope with the little we know! For there is nobody who has that intimate, intuitive familiarity with the phenomena which is the beginning of wisdom; and perhaps there can be nobody. Change is long, life short. Again there is nobody who has extensive systematic knowledge of social changes, for no good sociological classification of changes exists, to say nothing of broad information thus classified. And still again we have only just begun to think in terms of a generalized social system according to the example of the natural sciences, and what we can do with this social system or any other theory is but little. So in searching for the facts we must feel our way.

The Greek theory of recurrent world cycles, like the legend of the Golden Age, need not detain us. But there was also among the Greeks a theory of political cycles which, whatever its origin, came to be partly founded on observation. Polybius was a sensible man, and for Polybius, at least, it was an induction from experience that any form of government in due course takes on characteristics that lead to its destruction.[5] So another form arises, with a like result, and so after a time the first form returns. We may cautiously note this opinion, even though it seems likely that Polybius went beyond his facts, for many things that have lately been seen resemble the phenomena noted by Polybius and are consistent with his conclusions. Furthermore, old surviving constitutions are scarce today, and they seem to have been scarce also in times past.

[5] *Histories*, VI; 3, 1; 9, 14.

From Vico to Spengler moderns have added their own to ancient speculations about historical cycles. Let us pass them by, for they seem to offer little that we can use. But meanwhile experience has been accumulating and it has gradually become plain that most things undulate. The πάντα, ῥεῖ of Heraclitus is sharpened for us by a half unconscious induction into πάντα ῥεῖ καὶ ἀνάπαλιν ῥεῖ. Tastes, doctrines, schools and forms in the arts and letters rise and fall as they do, often more quickly nowadays, in dress and in personal adornment. So they do in philosophy and in political and social theory. Is not the history of the theory of our subject a fair instance of this? So too economic processes ebb and flow.

In this one instance some progress (note the intrusion of our word) has been made in getting on from vague statement in phrases like those of the last paragraph to measurement and mathematical analysis; and we have, such as it is, the description and the theory of the business cycle. Clearly the phenomena are at least undulatory, even more than they are cyclical. Clearly the frequencies and the amplitudes of the waves of the business cycle seem to follow no simple rules. Clearly these waves seem to be, in general, unrelated by any simple laws to other undulatory processes. If all this were not so, some people, who have not, would have grown rich.

For many economists and for most men of affairs and politicians the waves of the business cycle are long waves, but for the historian of, say, three thousand years, they are short. Now there exists no more familiar, no more trustworthy historical generalization than this: During two historical periods, very vaguely defined, that are commonly referred to as ancient and modern times, there has been much intense activity in many of the affairs of European men; during an intervening period, sometimes called the Dark Ages, *in these same affairs* little intense activity. So the large-scale or long-period wave phenomena seem to be highly correlated.

The question arises: Considering that we find waves of short period which may be regarded as slight disturbances of waves of long period, is there a wave of longest period? If not, is there a trend? These questions are meaningless. They are not even properly formulated as a first step in considering whether there is anything more to say about longer scale processes, for such waves are, like the conceptual schemes of the physicists, partly constructions of our own minds that go beyond the facts. There is perhaps nothing more to say except the obvious remark that long ago there seems to have been no human activity on the earth and that lately there has been what we regard as rather too much. However, most social processes seem to be more or less undulatory—or are so conceivable. And in many instances what we may take as the trends of these processes appear to be segments of undulatory processes of longer period.

What can be said of other general aspects of social change? Auguste Comte distinguished three stages—the theological, the metaphysical, and the positive—in the growth of human societies. It is perhaps psychologically significant, though logically irrelevant, to note that in the end Comte tried to found a new religion of his own invention, which seems inconsistent, and that he was a philosopher rather than an observer. Little survives of Comte's philosophy of social change. No doubt he was right in his belief that the social importance of science, both pure and applied, had on the whole increased. It seems to have increased enormously since his time.

Herbert Spencer conceived social change as a predominantly orthogenetical evolution from the simple to the complex. He held that the evolution is largely determined by what he supposed to be a law of the instability of the homogeneous. The meaninglessness of all this was long ago demonstrated by the physicist Tait in a forgotten controversy with Spencer. Perhaps a remark of Clerk Maxwell's on a postcard addressed to Tait will suggest the natural attitude of a man of science in these premises. Maxwell wrote:[6] "Have you (read) Willard Gibbs on Equilibrium of Heterogeneous Substances? . . . Refreshing after H. Spencer on the Instability of the Homogeneous." Of course many things in human societies have in many respects greatly increased in complexity, for example, in technological complexity and in organization. But there seem to be other things in which the movement has been, even over long periods, the reverse. This is held to be the case of the grammatical structure of language. Moreover, it seems that what may be called the rituals and routines of European societies have run a parallel course with grammar. Sir Henry Maine's views[7] on the replacement of status by contract bear on this point.

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[6] C. G. Knott, *Life and Scientific Work of P. G. Tait*, Cambridge, England, 1911, p. 284.

[7] *Ancient Law*, Chapter V.

Ends and Means

In what I have just said I have tried to select fair specimens of descriptions of social changes and to suggest their limited utility for our present purpose. We may now turn to opinions about what social changes are desirable. Nothing is more familiar than Jeremy Bentham's 'greatest happiness of the greatest number.' Of this Edgeworth once said:[8] ". . . is this more intelligible than 'greatest illumination with the greatest number of lamps'?" And Edgeworth was right, for two superlatives make the solution of the problem indeterminate, and the phrase is accordingly meaningless. Yet how much stronger is the emotional appeal of two superlatives! And who among us has ever noticed the obvious fallacy that Edgeworth noticed? And why has Edgeworth's remark been generally forgotten while Bentham's phrase is nowhere forgotten? Well, the reasons for all this are many, complex, and tolerably obscure. Let us talk about them.

To begin with, there is no logical or scientific test of desirability, except in relation to an end or purpose, and then desire is a poor word; we had better talk about utility. For instance, a boy may just want to go swimming. In that event the means to his end become problems that admit of something like logical or scientific study, and we may even safely speak of progress toward that *given* end. But unless the desire in question comes into conflict with other desires, experience shows that it is ordinarily a waste of breath to reason about going swimming. On the other hand, this boy may want to go swimming because another boy is going swimming, because he wants company. Then the question of other means to this end may arise and is, in principle, within the range of logical and scientific analysis. Let us accordingly speak of utility as relative to an end or purpose and in principle determinate. Let us also note that statements about the ultimate ends of society are expressions of wishes that are in general as meaningless as Bentham's 'greatest happiness of the greatest number.'

Utilities are heterogeneous. There are present utilities and future utilities; for instance, spending and saving. There are material utilities like food and psychological utilities like music or poetry or philosophy. And there are utilities of the individual and utilities of society. Being heterogeneous, utilities are likely to conflict. One of the commonest kinds of conflict is that between individual and social utilities. In such conflicts we hear of egotism and altruism, private interest and public welfare, the good of the service and self-seeking.

Such are our present difficulties. There is, however, one ultimate social end, survival, that seems to be different from the others, for unlike progress or justice it can be observed. The Roman Catholic church survives; Nineveh and Tyre do not. These facts can be verified on April 12, 1939. Moreover, survival, both of the individual and of society, is a widely accepted end in all societies. If, then, we define, *arbitrarily* define, the survival of a society as an end, it is possible to investigate what is vaguely called the survival value of certain things for that society. And then in this sense we may speak of their social utility. Of course, this task is difficult, not to say in general fruitless. For the social sciences are not yet very helpful in a dispassionate inquiry.

There is also, perhaps, some slight possibility of judging the total state of a society in relation to its survival. Thus in, say, 1910 there was a general feeling that the Austro-Hungarian empire had small powers of resistance, the British Empire great powers of resistance. As we vaguely say, the one empire seemed to lack, the other to have stability. Many historians were prepared to give reasons—not very sound scientific reasons, to be sure—in support of these opinions.

Science and Social Progress

One has lately grown accustomed to hearing from distinguished men of science assertions addressed to the general public that the effects of science, especially the effects upon society, are altogether good or progressive, or useful. I can see no grounds whatever for such an opinion. In the first place, referring to what I have already said, I assert that the question is meaningless. In the second place, I assert that if, by means of arbitrary definitions, the question were given meaning, the answer could be found at best only after years of research.

Let us consider two specific questions. At the moment one of the most conspicuous effects of science is the development of military aviation. According to what and to whose emotional judgments does this constitute social progress? According to what arbitrary definitions, and for whom, does this today or will this ten years hence make for the stability of what societies? Surely the only possible answer is, we do not know; or rather this correct answer is an impossible answer

[8] *Mathematical Psychics*, London, 1881, p. 117.

for nearly everybody, because the passions, and fear above all, intervene.

Now consider population. There are grounds for thinking that the present state of most human societies is unstable, that this instability is largely associated with the growth of population, that this growth of population is largely due to applications of science and to a decline in the rate of infant mortality and that this decline also is largely a result of applications of science. Of course, we do not know all this. But in the face of such considerations and in view of our obvious ignorance, who shall say that the applications of medical science *may* not some day play a large part in bringing about the destruction of many societies? Again I say, we do not know. And I suggest that men of science may well consider the question whether they wish to assert what nobody can know. In this way they might at least avoid the risk of making such statements as the following: "It is science and its applications that . . have knit the whole world together into a unity that makes war an anachronism."[9]

One thing seems clear; among the innumerable effects of science on society, some must be harmful according to any definition, now or hereafter, to many individuals and to some societies.

It is also worthy of note that sometimes the effects of science upon society may well be only implicit functions of the state of science, but explicit functions of the *rate* of scientific development. In other words, the same scientific development proceeding rapidly might have one effect, proceeding slowly another quite different effect. It is a curious theorem that, regardless of such differences, the effects are desirable—or undesirable. But, however strange theorems of this type may be, dogmas of this type are very familiar.

Let us look again at the problem of stability. In the beginning of Morley's essay *On Compromise* you may read[10] (as many Victorians did with satisfaction and approval): "The right of thinking freely and acting independently, of using our minds without excessive awe of authority, and shaping our lives without unquestioning obedience to custom, is now a finally accepted principle in some sense or other with every school of thought that has the smallest chance of commanding the future." To such nonsense a simple faith in progress may bring a man like Morley. I hope that his false prophecy needs no further remark, but the phrase 'obedience to custom,' which is perhaps the worst nonsense of all,[11] must now be examined, for it may lead us to one final and positive conclusion.

Morley was in many ways a thoroughly typical Englishman of his period. His behavior was faithful, conscientious, decorous, decent, seemly, congruous with all standards of good breeding, suitable to his orderly occasions, becoming in a high-minded citizen, befitting a man of his standing and integrity. He was kindly, honorable, upright, fair-minded, just, truthful, law-abiding, scrupulous, and trustworthy. His unblemished conduct and equitable demeanor unfailingly and with regularity observed the proprieties in all things. Was this *obedience* to custom? Certainly not. And it was neither unquestioning nor questioning obedience. It was something like the *li* of Confucius,[12] the manifestation, in general unconscious, of a need as strong as the need for food, or stronger. Had he learned this behavior intellectually? Again, certainly not; neither he nor any other man. And such behavior did not even occur to him when he wrote of 'unquestioning obedience to custom.' But it was deeper than intellectual processes in his nervous system, for it was largely constituted (in the widest sense of Pavlov's school) of conditioned reflexes. If it had been interfered with, an experimental neurosis might have resulted.

Machiavelli once said[13] that the ancient religion "was one of the chief causes of the prosperity of Rome; for this religion gave rise to well-regulated conduct, and such conduct brings good fortune, and from good fortune results the happy success of undertakings." This was also the opinion of Polybius,[14] who had observed the Romans. Again the conditioned reflex, together with ritual and routine, predominates, for the Roman religion was an all pervasive cult, and it was little more. Polybius speaks of it as maintaining the cohesion of the state.

Le Play's great study of European working-

[9] Robert A. Millikan, *Science and the New Civilization*, New York, 1930, pp. 68–69.

[10] 2nd ed., London, 1886, p. 1.

[11] Except possibly the notion that schools of thought command the future.

[12] "The Master said . .. . 'It is by the Rules of Propriety [li] that the character is established.'" Confucius: *Analects*, Book VIII, Chapter VIII, § 2. Translation by James Legge.

[13] *Discourses on the First Decade of Titus Livius*, Book I, Chapter XI.

[14] *Histories*, VI, 56, 6–13.

class families tells the same tale.[15] He found that those families were coherent in which respect for parental authority and for the Decalogue persisted, and his whole work clearly shows that regular conduct was again the important factor, as it had been in the Romans two thousand years earlier—regular conduct arising largely from conditioned reflexes associated with routines and rituals of the family and of religion.

Le Play's unsound families lacked a harmonious pattern of conditioned reflexes. With continuing industrial development the number of such families has probably increased, for about the end of last century Durkheim recognized and described a specific pathological state[16] which he called *anomie*. It seems to be due to an intensification and enlargement of the very conditions described by Le Play in his unsound families. Its differentia is extreme lack of cohesion. Durkheim speaks of an incoherent dust of individuals.

Still later Pareto, in his taxonomic studies of the residues, found the same thing.[17] The residues are widely current manifestations of sentiments, chiefly observable in nonlogical conduct. One class of residues, those of the so-called persistent aggregates, are plainly a product—in the main—of conditioned reflexes, rituals, and routines. In Pareto's considered opinion the persistent aggregates are the chief cohesive factor that binds societies together.

Here is a body of evidence and of carefully formed inductions. It points to a clear conclusion, to a conclusion that has been almost completely obscured by the European intellectual tradition. This conclusion has been obscured because the makers of the intellectual tradition, and still more its transmitters, like the political scientists of whom Aristotle speaks,[18] have rarely known human societies intimately at first hand. And when the facts have obtruded themselves, 'intellectuals' have too often regarded them as expressions of ignorant prejudice or superstition, unworthy of their notice, and as an impertinent intrusion of nonsense into their more serious concerns. The conclusion, greatly over-simplified, is this: The acquired characters of men are of two kinds. One kind is chiefly intellectual, the other arises chiefly from conditioning, and from rituals and routines. This it is that has been neglected by intellectuals; yet this is the older, the more primitive, and in many respects by far the more important of the two. Men share it, in modified form, with dogs and other animals.

A suitable dose, neither too much nor too little,[19] of such acquired characters, harmoniously interrelated, seems necessary to the stability of individuals and of societies, and as a foundation for orderly change. When social change is too rapid, a suitable dose is less often acquired. Without a very great deal of the resulting regular conduct, what we call liberty is impossible. Men will not *obey* custom, but if they feel a need to do right, that is if, like Morley, they are suitably adapted by conditioning to the ways of their own folk, they may often, at least in many circumstances, safely do as they please.

When societies are too unstable, individuals suffer. It seems probable that the psychoneuroses are most common in Durkheim's anomic people and that, for instance, disease of the coronary arteries, gastric ulcer and duodenal ulcer are most frequent in unstable societies. An index formed by adding appropriate measures of the incidence of these diseases and of divorce, and subtracting a measure of attendance at church, might sometimes run more or less parallel with an index of industrial development. Then would both—or neither—measure social progress? They would measure—what they measure.

Conclusion

It seems probable that, in a given place, at a given time, for a given end, there may be an optimum rate of change of a given thing. Some day this will be a subject ripe for careful study. Then the conditioned reflexes of men, as they are at any given time and in any given place, will be seldom negligible. More often than not, I suggest, when the end is survival, they will be again, as they have been so often in the forms that we name loyalty, the bonds of family, the sense of kinship, love of country, and religious devotion, powerful social forces, and dangerously lacking

[15] *Les Ouvriers Européens*, passim.

[16] *Le Suicide*, Paris, 1897, passim.

[17] *The Mind and Society*, New York, 1935, Vol. II.

[18] *Nicomachean Ethics*, Everyman's Edition, X, pp. 260–261: ". . . in all other cases those who impart the faculties and themselves exert them are identical (physicians and painters for instance) matters of Statesmanship the Sophists profess to teach, but not one of them practises it . . .

". . . they [the Sophists] have no knowledge at all of its nature and objects . . ."

[19] I suggest that there may have been too much, for various ends, about five centuries ago in China, and that there may be too little today in our own society.

when in default. For note well that humanitarian sensibilities, liberal opinions, and social philosophies, in this respect like scientific attainments, are not the equivalent of the sentiments that accompany conditioned reflexes. In origin and in function they are different things. Sentiments of the first kind, arising more or less directly out of concrete experiences, hardly at all related to the intellect, closely related to what we call in some men breeding, in others discipline, in still others decency, act as cohesive forces. Sentiments of the second kind, much less a result of concrete experience and of conditioning, much more closely associated with intellectual activity, seem to have other functions, and not this one. Both kinds of sentiments will probably be powerful social forces in the future.

The cohesive forces, though neglected and despised by 'intellectuals,' though weakened by rapid social change, might even save us from disaster. This we can only surmise, but that they will continue to operate is certain, "car il faut cultiver notre jardin," and they arise spontaneously, by conditioning, from this cultivation.

Meanwhile a meaningless word will still be meaningless. And yet we need not hate progress, unless, like Holmes, we do so in self-defense. That a meaningless word should have had for two centuries the fortunes of this word is no small thing.

A PAPER ON SOCIAL PROGRESS

By Crane Brinton

When I received the invitation to join in the discussion of this grand phrase, "social progress," my mind turned with the comforting assurance of professional habit to the history of the word "progress." The great Oxford English Dictionary confirmed what I already vaguely knew. The word is of learned Renaissance coinage from the Latin, and first appears in English at the end of the 15th century. It means a moving forward or onward in a purely physical sense; the Latin "pro" here carries no promise of better things ahead. Thus in 1590 Queen Elizabeth may make a progress through her kingdom; her kingdom makes no progress. Indeed, the Oxford dictionary cannot find a *clear* example of what it calls the "figurative" sense of the word—the sense of technical, moral, social "improvement" so familiar in our current vocabulary—until 1742.

I quite agree with Mr. Henderson that the word "progress" as currently used is meaningless. I agree also that the word is so overcharged with human hopes and fears that it can only with great difficulty be used as a symbol in performing logical operations. But almost every important word we try to use in performing such operations on problems in the social sciences is subject to similar, if less extreme, limitations. I should suppose that the use of the word "meaningless" had already aroused in this room sentiments not altogether suited to the most detached symbolic thinking. But even at the level of the confused and partisan thinking with which most of us human beings get along, "progress" seems today to be a word more charged with conflicting associations and sentiments than words like Truth or Justice. I think that I can best serve the purposes of this discussion if I try to disentangle some of the many meanings this meaningless word has borne since it soared from its humble Renaissance confines to its present handsome, wide, if somewhat unsubstantial quarters.

First, there is the sense of progress, improvement, in a process or technique. Thus in the technique of transportation we have all of us witnessed progress from the horse-and-buggy to the airplane. This is the sense of "material" progress which, contrasted with "moral" or "spiritual" progress or lack of progress is an apparently inexhaustible subject today for the teacher, preacher, and editor. Yet even in the comparatively limited sense of improvement in techniques, the word contains ambiguities. Such progress is commonly regarded as "scientific" progress, and rather snobbishly limited to the last few hundred years. Actually, however, our distant ancestors, even in the abysmal Dark Ages, made very important improvements in specific techniques without ever using the word "progress" or apparently having the sentiments now aroused by, or associated with, the word. The unknown early mediaeval inventor of the horse-collar, for instance, made possible a great increase in horse-power at a time when the science of physics can hardly be said to have existed. The mediaeval three-field system seems to have been a great improvement in land usage over previous systems. In fact, right up to the middle of the nineteenth century, invention—invention largely guided by empirical methods, by hunches and rule of thumb—seems to have gone on increasing without any clear relation to notions of progress prevalent after the early eighteenth century, and also without depending on what is commonly called "pure" science. Indeed, as Mr. Henderson likes to point out to his classes in the history of science, up to about 1850 applied science led the way for pure science; the steam-engine did more for science than science did for the steam-engine. Since that date it is true that these positions have been reversed, and that scientific progress—I mean the cumulative knowledge acquired in such fields as physics, for instance—has directly made possible improvements in techniques, or applied science. If in this Academy some hundreds of years from now, men still talk about progress, it may well be that this change in the roles of pure and applied science will seem the most significant thing in the history of the nineteenth century.

Second, there is the sense of the word progress which gets most of its prestige from theories of organic evolution developed in the last hundred years or so. I need hardly remind you that orthogenetic evolution has one set of meanings for the biologist and other and much vaguer sets of meanings for the ordinary educated man. As a form of progress, evolution is probably for most literate Americans associated with "Up from the Ape" or, since education does somehow contrive to spread a rather surprising amount of informa-

tion, with a nice neat series of pictures starting with a little four-toed *Eohippus* scurrying over the Western plains a few million years ago, and ending with a Percheron and a race-horse side by side. Of the confusions which this notion of evolution has bred when it has been applied to problems of men in society I need hardly remind you. Poor Darwin has been brought in to justify some of the most amazing notions of a fine, beneficent struggle for life, from exterminating enemies in war to driving business competitors into bankruptcy. The once famous Benjamin Kidd was sure that Darwinism in politics meant no such crude competition as prevails among mere plants and animals; competition on a "higher plane" among human beings religiously devoted to "projected efficiency" (Kidd's own name for Progress as a goddess)—such competition alone could lift the race to the heights on which it belonged. I believe we have already rather liberally used the term "meaningless" tonight, or I would ask you to reflect longer on that term "higher."

Third, there is the sense of progress already emerging pretty clearly from what we have just considered, and that is moral or social progress. Here we encounter problems which the historian is bound to leave in a large part to the philosopher and theologian. It is evident that men do commonly distinguish—and not just in words but in action—between what they feel ought to be, and what is. This distinction involves a struggle to alter existing conditions "for the better," to use an old phrase of comparative innocence. Whether a given aim, particularly an aim so extensive as to be fitly called an ideal, is or is not ethically good is one of those questions with which I do not think the historian, as historian, can deal. He can try to make clear what men seem to have meant in the past when they talked of ethical good, and—a much more difficult task—how their talk and their action were related. I think we can say that for the last two centuries or so "progress" has been one of the important blanket-words under which men have sought to bring together what they felt to be ethically desirable. A good German Nazi would maintain that limiting women to domestic life in the monogamous family is a necessary part of progress, and a good many of our advanced thinkers hold that to emancipate them entirely from such a life is a necessary part of progress. In conventional logic they cannot both be right, but we are not dealing with the kind of human activities in which logic has much part. I think we shall have to say that they are both right, or if it makes you feel better, that they both *think* they are right. If Progress is a goddess, she must be right; the gods are always right.

Now as a goddess it is true that Progress is only a few centuries old, which makes her a mere child as compared with Justice. But I do not altogether share Mr. Henderson's low opinion of her charm and staying power, nor do I think she is quite fairly described as "a sterile intellectual construction." Perhaps I can make more clear what I am trying to say if I drop a metaphor which is already panting a bit from exhaustion anyway. The vague notions embodied in the concept of "moral progress" as held today by the ordinary West European and American seem to me to be linked to notions and feelings far older than the word progress, to notions and feelings about the future.

I do not disagree with the conventional outline of histories of the idea of progress. It seems true enough that for the Greeks—I start with them out of old habit, and because I do not think that earlier peoples like the Egyptians and Chaldaeans have much help for us in this matter—for the the Greeks the Golden Age lay in the past, and insofar as men thought at all about the general course of human history, they usually regarded it as a falling off from an earlier perfection. It is also true that Christianity, inheriting the old Eastern story of the Garden of Eden, and reinforcing it by very firm eschatological doctrines of Heaven and Hell, also made life on this earth something which could not in any general sense be greatly improved. Finally, it is true that as the Renaissance got well under way, men, and particularly intellectuals, began to think of history in a quite different way, to think of it as a process of development from barbaric inadequacies, physical and spiritual, to civilized adequacies, also physical and spiritual; and this line of development they projected into the future, putting their Golden Age on this earth indeed, but ahead, not behind, in time.

Though I am willing to admit that to the intellectual historian, this alteration in the location of the Golden Age, of Utopia, is interesting and important, I am more struck with the continuity afforded by the steady preoccupation of men with their future which is exhibited in all these notions of a better world. You may say that for the mediaeval Christian Heaven and Hell meant something very personal and, as the

future goes, immediate; while for our contemporaries progress is impersonal and remote. That is, I grant you, a real difference; but in this paper I prefer to emphasize the fact that if the notion of progress is associated in men's minds with specific notions of "the good" which they feel strongly ought to be realized, then progress can seem very personal, very dear, very close. Modern revolutionists, most of whom are earnestly on the side of progress, seem to work as determinedly and as actively as if they expected the Second Coming instead of the fruition of a natural historical process. As long as the notion of progress is closely associated with our immediate notions of the difference between what is and what ought to be—and this seems to me to be the case in the Western World today—then progress will probably remain one of the more important ethical abstractions in common use.

In fact, it seems to me that some vague notion of progress has so far penetrated into the consciousness of most Europeans and Americans that even the onset of a very dark time of troubles foreseen by our prophets of doom might not destroy faith in progress. The Middle Ages witnessed invention, increase in wealth and population, much of what we call progress, without ever using the word, and indeed while subscribing almost unanimously to an official belief in the impossibility of any general improvement this side of the grave. There is usually some sort of gap between ethical beliefs and lives led under those beliefs. It would not appear unduly paradoxical to assert that even in the new Dark Ages which are ahead of us (according to the prophets, at any rate) when invention ceases and the sciences decay, men may still bear witness to their belief in progress. Such a belief does not seem to some temperaments to be very rich imaginatively, and it does seem to promise, without delivering, something tangible and concrete. But the leaders have been promising the Classless Society in Russia nearly a quarter of a century without apparently destroying popular faith in Marxist abstractions. I admit that in itself belief in progress does not seem to be a very consoling belief; but it may well be a bit short-sighted of us to assume that all that men are likely to need from such vague and semi-religious beliefs is consolation. Progress is probably a fair-weather goddess but need we anticipate a future of hurricanes?

I am afraid that some of you have by now decided that I am a rather lukewarm, and even treacherous, advocate of progress. Some of you perhaps feel that I ought to face the question, well, after all, aren't we as a race getting ahead? Isn't there evidence of progress even in concrete morals, if not since the Greeks at least since the cave men? These are endless questions, and certainly cannot be answered scientifically. But they are too natural to be unfair, and in these last few minutes of my paper I should like to suggest, not an answer to them, but one reason why they seem to us in 1939 so pressing.

Briefly, we are living today in the backwash of one of the most extraordinary waves of optimism that has ever struck mankind. Into the historical background of the kind of belief represented by men like Herbert Spencer, H. G. Wells, Herbert Croly, and hundreds of other scientists and men of letters of their time I cannot go here. Put very simply, they were so impressed with concrete evidences of progress in technique, with the grand course of human development they thought Darwin taught them, with the freedom and readiness they themselves enjoyed in thinking about human behavior, that they came to take their words for all men's deeds, or at least prospective deeds. It is unwise to take your own words for your own deeds. It is disastrous to take them for other men's deeds. Herbert Spencer noted as a sign of progress in his own day the fact that women were abandoning the use of rouge and face-powder, a process which he firmly believed would continue as women grew more and more away from the vestiges of savage adornment.

This last is a trivial and undignified matter, but it illustrates the kind of thing our distinguished predecessors passed over in their hurry and hope. In some ways it seems that change in the behavior of men in respects socially very important is almost as slow as the kind of change the geologist studies. In other respects, notably in certain fashions of dress, and in many of the kinds of writing literary people do, in talk and so on, the behavior of men may change fairly rapidly. It was the fashion among French aristocrats about 1789 to talk irreverently and as wittily as possible against the Church; it was the fashion among these same aristocrats ten years later to display a sorrowful reverence when they talked of the Church. The total amount of lying, thieving, gambling, overdrinking and overeating, wife-beating, cheating at cards, bullying and boasting, and similar acts unsuitable in the good

life I feel almost sure hardly varied among French aristocrats in those ten years.

Now if I may waive questions about the relativity of moral ideas, I can admit that there has been a rough agreement among many men in our Western world for some thousands of years as to important features of the good life. If we could have less lying, less cruelty, less jealousy, less vanity, less rudeness on this earth I think we might well agree that there had been something tangible in the direction of what most of us vaguely mean by the subject of tonight's symposium. This would certainly be a definite kind of social progress. Unfortunately we know but little as to how men's behavior in such respects changes; and what little we know suggests that it changes very very slowly, much more slowly than forms of government, social planning, and even religion.

One final word. I regard the general tone of my paper as optimistic. Only as measured against the inordinate and almost unprecedented hopes for social progress held by many educated men of the years just before 1914 do the events of recent years seem unduly horrible and unbearable. The pessimism and the doubt so evident among us is in some part but the natural revulsion from hopes strung too high and therefore deceived. I suggest that in the long run of history we have no right to expect rapid changes in those fundamental, if undignified, forms of human behavior which largely condition social life. Men never can catch up with their prophets; but this I think is as true when the prophet is called Hitler as when he is called Wilson.

SOCIAL PROGRESS

By Edwin Bidwell Wilson

Mr. President, had I not stood for some time in your position as President of this Academy and come thereby to understand the serious responsibilities of the office in respect to our meetings and had I not been put greatly under obligation by the readiness with which the Fellows of the Academy supported me, I should surely have declined your insistent invitation that I appear in this symposium on What Constitutes Social Progress, for knowing myself to be incompetent in these premises I prefer to be a listener rather than a speaker upon them.

Mr. Henderson has shown that the term social progress is meaningless in the scientific sense and Mr. Brinton, after quite agreeing, has come to the general conclusion that social progress denotes an aspiration.

It was instructive to me to learn that the lexicography of the word progress shows that the modern meaning first appeared 75 years after Bunyan's Pilgrim's Progress which banished my earlier interpretation of 50 years ago that progress in this connection had the Victorian connotation. I am also interested to learn that a recent picture in the papers of Smith College girls in the Harvard tank surrounded by little but water, however much it may mean for technological progress in the portrayal of news, does not necessarily mean any real social progress over the Victorian period but only a change in some of women's styles.

Coming after the previous speakers it would be folly for me to try to tell you what social progress is or may be; rather will I turn to the questions: Why can we not attribute a scientific meaning to the phrase, and is there any hope that we may ever be able to do so?

First let us look at science and engineering: In what does their progress consist? Certainly it consists of something more than just journeying around like Queen Elizabeth. We have more information, we can do more things with greater assurance of success than we could 2000 years or 200 years or even 20 years ago. With all the wastage in scientific and technological effort there is an accumulation of knowledge and of method with a resultant increase of control in some fields of activity. This is true whether of physics or of biology or of medicine. The scientist gives definitions based on increasing discrimination with respect to facts. The scientist builds upon previous knowledge. He may make no spectacular discoveries; his may be only the patient classification seen in our research herbaria. Indeed scientists are proverbially suspicious of brilliancies. I would not give the impression that every well established result leads at once to an improvement in technology or in our control over nature; nor would I assert that improvements in these matters do not still sometimes come from invention, which in some respects is ahead of that coordinated body of knowledge we call science. What I desire to emphasize is that throughout all these fields, pure or applied, there is advance of the sort one finds in the growth of a coral reef—there is building upon what is already laid down.

Such is also true to no inconsiderable extent in some fields called humanistic. Our knowledge of historic fact has increased through research—again with all allowances for certain wastages. The same is true of linguistics or philology. Is this true, too, of the social sciences?

Let me begin by quoting from a translation from the Gest Chinese Research Library at McGill University:[1]

> "In the year 524 B.C., Emperor Ching of the Chou dynasty thought that the coins in circulation were much too light, and issued an order to mint heavier coins and banish the light ones from circulation . .
>
> "Regarding the drastic change, Shan Mu-kung, a minister of the government, comments as follows: From time immemorial the monetary system of the government has been so regulated as to relieve the people in time of distress (i. e., economic depression). When the inconvenience of the people is not great, more heavy coins are put into circulation for the reason that when the coins are light prices of commodities go up. In this case the heavy coins are standard value, while the light ones are auxiliaries—but they are both in circulation. On the other hand, if the inconvenience of the people is great they cannot bear the burden of heavy money. The light money automatically becomes the standard value and the heavy auxiliary.
>
> "Now, the Emperor has ordered the abolition of light coins completely. The immediate result of this change will be an enormous decrease in the income

[1] See Wên hsüan t'ung k'ao (Edition 1896, A.D.), Chap. 8, pp. 4–15, by Ma Tuan-lin, 13th century A.D. Rendered by S. D. Quong.

of the people and consequent hoarding will be inevitable. All this causes a bad effect on the national treasury and directly raises the rate of taxation. When the rate of taxation is raised, financial disaster and political discontent follow.

"Preparation should be made in advance to meet the coming of a financial crisis. If remedy is to be applied only after the crisis has arrived it may be impossible to meet the exact condition and consequently will cause great anxiety."

This is from a compilation made in the 13th Century, A.D., and based upon original Chinese sources. I do not know who the minister Shan Mu-kung was or whether he actually lived in 524 B.C. as implied. Having regard to the changes in meaning of words, as exemplified by "progress" itself, and to the difficulty compilers and translators have to avoid reading into ancient texts meanings it is unlikely the ancient writers could have intended, I still submit that the quotation is a remarkable statement—as remarkable if it were made today as if it were made whether in the 13th century A.D. or in the 6th century B.C. It is a statement of Gresham's law as good, I think, as one could find anywhere and indeed it seems to involve refinements rarely incorporated in the statement of that law. I have read and heard much looser talk about money and economic control in very recent years.

Now I do not raise the question: Was Shan Mu-kung right? To be right in any complex field implies a statistical inference based upon a careful collection and a discriminating comparison of a large number of varied instances. To be right in geometry means merely that we reason correctly from stated consistent premises; we have long since determined one or more sets of such premises. But merely to reason correctly from stated premises in a complex field is almost the surest way to ensure that we are wrong—for in the first place we do not know that the premises are consistent and we are tolerably certain that owing to the very complexity of the field there may be such an oversight on our part of the variables which should have been covered by our premises as to make those premises even if consistent quite too fragile a foundation for verifiable truth.[2]

Shan Mu-kung was probably a practioner, a practical man, rather than a theorist.[3] Persons who deal thoughtfully with affairs may, like the technologist, come to sound truths well in advance of truly scientific analysis—these are discoveries. Indeed it is, I believe, a sound generalization from long experience that until such practical persons have come upon sound truths no science can develop and that the development of science comes from the painstaking examination of those truths to ascertain what is a better, a more precise, statement of the conditions under which the truth is valid and of those conditions under which it would become invalid. When science has become highly developed—has made progress if you will—it may lead, it may even become too proud to follow or so proud as to assume that its wisdom may be stretched to cover

[2] See, for example, Alfred Marshall, Principles of Economics, 8th Ed., 1930, Appendices C and D. "Economics contains no long chains of deductive reasoning," p. 781. "Even in mechanics long chains of deductive reasoning are directly applicable only to occurrences in the laboratory. By themselves they are seldom a sufficient guide for dealing with the heterogeneous materials and the complex and uncertain combination of the forces of the real world," p. 771. "It is obvious that there is no room in economics for long trains of deductive reasoning: no economist, not even Ricardo, attempted them. It may indeed appear at first sight that the contrary is suggested by the frequent use of the mathematical formulae in economic studies. But on investigation it will be found that this suggestion is illusory, . . .", p. 781. One should read the whole text of these Appendices. I may say that entirely apart from any difficulties in economics which may inhere in trusting mathematics, it not infrequently happens that the mathematics itself of the mathematical economist is far from completely trustworthy.

[3] There is no absolute dichotomy between fact and theory or between practical and scientific pursuits; rather is there involved a difference in the weighing or in the neglect of the "other things" which the theorist or pure scientist postulates "to be equal," but which in practice so seldom are. A distinction is beautifully drawn by H. Pirenne in the preface to the English translation of his Economic and Social History of Medieval Europe (p. xi): "There are still so many gaps in our knowledge that I have in many cases been obliged to resort to probability or to conjecture, in order to explain events or to trace their interconnection. But I have been careful not to resort to theories, lest I should do violence to the facts." Those who appreciate this distinction will not make the error of thinking of science as chiefly theory instead of as chiefly coherent factual knowledge; the few successful general theories are so impressive in their isolation that they tend to blind us in the matter of what science is—also speculation is so attractive and a multiform array of detail so tedious! The "expanding universe" may be the bauble of a decade; positional astronomy is a creation of centuries.

all matters under Heaven howsoever widely removed from the special competency of the scientist or his science—but pride often leads to a fall. I have tried to point out that when science is not well developed any pride of this sort whether of the scientist or of his subject is almost certain to lead to a fall. Aristotle in closing his Ethics seems to fear that the academicians who discuss political science are fallible if not fallen—and one may wonder whether his observation was any more true of the Sophists than it may be of their present followers. I think he would bet on Shan Mu-kung or on Josiah Stamp or possibly even on Hjalmar Schacht as against Irving Fisher or J. M. Keynes.

When referring to this matter of pride in science and of that overweening pride of the scientist which leads him to pontificate about all sorts of topics on which neither he nor his science are competent we need not think of the social scientist as the worst offender today. He does not talk carelessly of physics or chemistry or astronomy, and except as he abandons the study or misuses the classroom to become a frank propagandist for some social program, he is usually careful in his utterances, suffering from an inferiority complex born of what he knows to be the incompleteness and unsatisfactoriness of his knowledge rather than from a know-it-all blatancy. It seems to be the natural scientist, particularly in the so-called physical sciences, who errs most in stepping out of his role with pronouncements upon economics, religion or what-you-will, based not upon careful study of those fields but upon his own desire to preach. An eminent pathologist who turned to psychology, Sigmund Freud, gained a deserved reputation for his analysis of such phenomena. However serious the sexual libido or how variable its manifestations, I sometimes wonder whether there be not even more seriousness in the lust for harangue. Who knows but some future scientist may acquire great repute from an analysis of the all pervasive and overwhelming effects upon us of tittilations arising not from the spermatic but from the vocal cords!

I fail to see how we shall ever be able to impute scientific meaning to such a term as social progress until social science has advanced as a science considerably further than seems as yet to be the case. And I fail to see how social studies can become scientific as long as the *mores* of our social scientists place brilliancy so far ahead of patience and generalities so far ahead of specification. We very much need a handbook of the social sciences which tells us what is true under what restrictive conditions. In its first edition it might be a very small book but it would furnish a very different base for growth from that afforded by the 15 volumes of the Encyclopedia of the Social Sciences,—growth in grace rather than in stature.

You may be interested in the experience of the Social Science Research Council in attempting to find out what is known in social science. Shortly after appointment as Executive Director of that Council Professor R. T. Crane pointed out that social scientists seemed usually to start research on some large ill-defined subject practically *ab initio* so that it was impossible to see just from what their conclusions flowed or even where they fitted into what was known. He determined to set about making social science grow from bed rock or as nearly from bed rock as one could arrange.[4] A committee of three persons each with a considerable record of publication in the field of social psychology was selected. This committee was asked to choose some topic, no matter how small, with which all three were professionally familiar and to put down: First, that knowledge on their selected topic which they all agreed had been ascertained and corroborated by critical observation; second, some propositions which had been suggested by investigators on the basis of a certain amount of observation and which could probably become incorporated with this body of ascertained knowledge provided they could be corroborated; and third, some proposals for further research which if successfully prosecuted would probably develop new knowledge coherent with the foregoing. This was an excellent program: It left the choice of a special field to three experts. It was just a little start toward a series of short monographs which should foster research, not spectacular but coherent, in which all who wished might collaborate toward an organic growth of certain small nuclei in the social science field.

The results of this and similar tentatives have not been notable. It immediately appeared that the three psychologists could not agree on any-

[4] I wish to absolve the Executive Director from all liability for my statements. I have been upon the Committee on Problems and Policy of the Social Science Research Council continuously for a decade and assume full responsibility not only for my statements but for the possible indiscretion of my making them in this place.

thing, in any no matter how restricted a subfield of their studies, which could be considered as known. Next they wanted to hold and were permitted to hold a conference of twenty or thirty other experts to tell them what was known —this was foredoomed to failure, one does not go to Babel to compose a pocket dictionary. Then they were permitted to engage a considerable number of sub-experts to canvass the literature of the subject and these able enterprising young people brought in such reams and reams of stuff that the committee of three were sunk—or should I say were tossed about in bewilderment upon the froth? Finally the committee as a committee gave it up. One member prepared a monograph to which I believe the others would not entirely assent and which was not of the sort originally contemplated. I do not say that the monograph is useless, it may be better than many, but the experiment to get a baby handbook on a little field failed. Although other similar experiments in other fields have usually been abortive, we still have some hope that sooner or later we may take a few steps toward establishing foundations upon which some topics in social science may grow coherently.

Until such coherent growth has begun and gained considerable momentum, until social science has advanced somewhat further from the zoology of the Bestiaries toward that of the Agassiz Museum, we shall probably not have the background on which to say what is social progress, and when social science has thus advanced we shall not be talking in terms of social progress but rather in those of various sorts of social progress and of social retrogression, as indeed a discriminating historian like Mr. Brinton or an analytical scientist like Mr. Henderson already do.

Mr. Brinton feared you might think him pessimistic. I fear you may think I have attacked social science. Not so. One does not attack the sea slimes from which we all derive. One notes merely that they do not cohere and build up like the coral reef. Science is what coheres and builds up. It is the residue of dead scientists who have left something after their hopes and emotions and life are gone. If somehow we can get a little more calcium into the system of the social scientist he too will make his deposit and perchance will not have had any less satisfactory life.

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